Application No. 10/019,816
Filed: March 27, 2002
TC Art Unit: 1642
Confirmation No.: 9944

AMENDMENT TO THE CLAIMS

1 - 216. (Cancelled)

217. (Currently Amended) A method for modulating activity of a cell, the method comprising:

treating the cell with an effective amount of an agent that ~~inhibits~~ binds to a MAP kinase or cytoplasmic region of an integrin such that binding of ~~a~~ the MAP kinase to a binding domain of ~~an~~ the integrin for said MAP kinase is inhibited.

218. (Currently Amended) A method according to claim 217, wherein the agent comprises a fragment of said integrin comprising said binding domain, or an analog or derivative thereof that ~~inhibits~~ binds to the MAP kinase such that the binding of the MAP kinase to the binding domain of the integrin is inhibited.

219. (Currently Amended) A method according to claim 217, wherein the agent comprises a polypeptide or an analog or derivative thereof that binds to the MAP kinase or cytoplasmic region of an integrin such that ~~inhibits~~ the binding of the MAP kinase to the binding domain of the integrin is inhibited.

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220. (Currently Amended) A method according to claim 217, wherein the agent is a fusion protein incorporating an inhibitor moiety that binds to the MAP kinase or the cytoplasmic region of the integrin ~~inhibits binding of the MAP kinase to the binding domain of the integrin~~.

221. (Currently Amended) A method according to claim 217, wherein the agent comprises an inhibitor moiety that binds to the MAP kinase or the cytoplasmic region of ~~for inhibiting the binding of the MAP kinase to~~ the integrin and a facilitator moiety for facilitating passage of the inhibitor moiety across the cell membrane of ~~a~~ the cell, wherein the facilitator moiety is linked to the inhibitor moiety.

222. (Cancelled)

223. (Previously Presented) A method according to claim 217, wherein the activity of the cell is growth of the cell.

224. (Previously Presented) A method according to claim 217, wherein the cell is a cancer cell.

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225. (Previously Presented) A method according to claim 224, wherein the cancer cell is a colon cancer cell.

226 - 235. (Cancelled)

236. (Currently Amended) A method according to claim 217 comprising administering ~~to a mammal in need of such treatment~~ an effective amount of the agent to a mammal in need of such treatment.

237. (Previously Presented) A method according to claim 236, wherein the method comprises therapy or prophylaxis of cancer or a condition associated with a predisposition to cancer.

238. (Previously Presented) A method according to claim 237, wherein the cancer is selected from the group consisting of cancer of the lip, tongue, salivary glands, gums, floor and other areas of the mouth, oropharynx, nasopharynx, hypopharynx and other oral cavities, oesophagus, stomach, small intestine, duodenum, colon, rectum, gallbladder, pancreas, larynx, trachea, bronchus, lung, breast, uterus, cervix, ovary, vagina, vulva, prostate, testes, penis, bladder, kidney, thyroid and skin.

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239. (Cancelled)

240. (Currently Amended) A method according to claim ~~222~~ 217 wherein the agent binds to a binding site of the MAP kinase for the integrin or to the binding domain of the integrin for the MAP kinase.

241. (Previously Presented) A method according to claim 217 wherein the MAP kinase is a member of the ERK family or the JNK family.

242. (Previously Presented) A method according to claim 241 wherein the MAP kinase is ERK2.

243. (Previously Presented) A method according to claim 217 wherein the integrin comprises an integrin subunit selected from β3, β5 and β6.

244. (Currently Amended) A method according to claim 217 wherein the agent comprises a polypeptide having an amino acid sequence selected from the group consisting of RSKAKWQTGTNPLYR (SEQ ID No.

2), RARAKWDTANNPLYK (SEQ ID No. 22), RSRARYEMASNPLYR (SEQ ID No. 23), and RSKAKNPLYR (SEQ ID No. 3), or an analog or derivative of the polypeptide which binds to a binding site of the MAP kinase for the integrin.

245. (Previously Presented) A method according to claim 217 wherein the agent comprises a core amino acid sequence of the binding domain of the integrin, or an analog or derivative of the core amino acid sequence which binds to a binding site of the MAP kinase for the integrin.

246. (Previously Presented) A method according to claim 217 wherein the cell is a cancer cell expressing the integrin selected from the group consisting of cancer cells of lip, tongue, salivary glands, gums, floor and other areas of the mouth, oropharynx, nasopharynx, hypopharynx and other oral cavities, oesophagus, stomach, small intestine, duodenum, colon, rectum, gallbladder, pancreas, larynx, trachea, bronchus, lung, breast, uterus, cervix, ovary, vagina, vulva, prostate, testes, penis, bladder, kidney, thyroid and skin.

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247. (New) A method for modulating activity of a cell, the method comprising:

selecting an agent for effecting the modulation of the cellular activity;

treating the cell with an effective amount of the agent, the agent binding to a MAP kinase expressed by the cell such that binding of the MAP kinase to a cytoplasmic region of an integrin is inhibited.

248. (New) A method according to claim 247 wherein the agent binds to a binding domain of the MAP kinase for the integrin.

249. (New) A method according to claim 247 or 248 wherein the agent comprises an inhibitor moiety that binds to the MAP kinase and a facilitator moiety that facilitates passage of the inhibitor moiety across the cell membrane of the cell, wherein the facilitator moiety is linked to the inhibitor moiety.

250. (New) A method according to claim 247 wherein the modulation of the activity of the cell comprises down regulation of cellular activity and the cellular activity is selected from the group consisting of cell growth and cell proliferation.

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251. (New) A method according to claim 250 wherein the cell is a cell of a cancer and the agent is administered to a mammal for prophylaxis or treatment of the cancer.

252. (New) A method according to claim 251 wherein the cancer is selected from the group consisting of cancer of the lip, tongue, salivary glands, gums, floor and other areas of the mouth, oropharynx, stomach, small intestine, duodenum, colon, rectum, gallbladder, pancreas, larynx, trachea, bronchus, lung, breast, uterus, cervix, ovary, vagina, vulva, prostate, testes, penis, bladder, kidney, thyroid and skin.

253. (New) A method according to claim 247 wherein the MAP kinase is a member of the ERK family or the JNK family.

254. (New) A method according to claim 247 wherein the integrin comprises an integrin subunit selected from $\beta 3$, $\beta 5$ and $\beta 6$.

255. (New) A method for modulating activity of a cell, the method comprising:

selecting an agent for effecting the modulation of the

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cellular activity;

treating the cell with an effective amount of the agent, the agent binding to a cytoplasmic region of an integrin expressed by the cell such that binding of a MAP kinase of the cell to the integrin is inhibited.

256. (New) A method according to claim 255 wherein the agent binds to a binding domain of the integrin for the MAP kinase.

257. (New) A method according to claim 255 wherein the agent comprises an inhibitor moiety that binds to the integrin and a facilitator moiety that facilitates passage of the inhibitor moiety across all membrane of the cell, wherein the facilitator moiety is linked to the inhibitor moiety.

258. (New) A method according to claim 256 wherein the agent comprises an inhibitor moiety that binds to the integrin and a facilitator moiety that facilitates passage of the inhibitor moiety across all membrane of the cell, wherein the facilitator moiety is linked to the inhibitor moiety.

259. (New) A method according to claim 255 wherein the modulation of the activity of the cell comprises down regulation of cellular activity and the cellular activity is selected from the group consisting of cell growth and cell proliferation.

260. (New) A method according to claim 259 wherein the cell is a cell of a cancer and the agent is administered to a mammal for prophylaxis or treatment of the cancer.

261. (New) A method according to claim 260 wherein the cancer is selected from the group consisting of cancer of the lip, tongue, salivary glands, gums, floor and other areas of the mouth, oropharynx, stomach, small intestine, duodenum, colon, rectum, gallbladder, pancreas, larynx, trachea, bronchus, lung, breast, uterus, cervix, ovary, vagina, vulva, prostate, testes, penis, bladder, kidney, thyroid and skin.

262. (New) A method according to claim 255 wherein the MAP kinase is a member of the ERK family or the JNK family.

263. (New) A method according to claim 255 wherein the integrin comprises an integrin subunit selected from $\beta 3$, $\beta 5$ and $\beta 6$.